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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,843	04/27/2001	Claudiu D. Pruteanu	20010142.ORI	2768
23595	7590	01/11/2005	EXAMINER	
NIKOLAI & MERSEREAU, P.A. 900 SECOND AVENUE SOUTH SUITE 820 MINNEAPOLIS, MN 55402			KEENAN, JAMES W	
			ART UNIT	PAPER NUMBER
			3652	

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/844,843	Applicant(s) PRUTEANU ET AL.	
	Examiner James Keenan	Art Unit 3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 51-53,55-57 and 59-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 51-53,55-57,59-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/4/04 (in accordance with the instructions set forth in the RCE filed 12/28/04) has been entered.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brandt ((US 5,851,100) in view of McNeilus et al (US 5,833,429), both of record.

Brandt, as noted previously in paper #15, shows the invention essentially as claimed, particularly a pivoting arm lift and dump arrangement including boom 24, double acting hydraulic linear actuator 68, one-piece arm 26, mounting shaft 74, grabber device 28, and various sensors, actuators, and controls as claimed.

Brandt does not show the arm curved to reduce the lift and dump radius.

McNeilus et al, as also noted in paper #15, show a similar invention assigned to the same assignee as Brandt, including several embodiments of pivoting arms, some of

which (figures 12-15) are virtually identical to that of Brandt, and others (figures 5 and 8) which have a curved or bent structure.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have modified the apparatus of Brandt by utilizing a bent or curved arm structure, as shown by McNeilus et al, as this is shown to be an alternate equivalent arm structure in the same environment, and would at least to some extent reduce the lift and dump radius.

4. Claim 59 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brandt in view of McNeilus et al, as applied to claim 64 above, and further in view of Duell et al (US 6,123,497) and Tordenmalm et al (US 4,896,582), both of record.

As noted in paper #15, Brandt does not show a control means to damp the action of the hydraulic cylinder toward the extremes of travel thereof, while Duell et al show a mechanically "cushioned" hydraulic cylinder in a similar refuse collection vehicle and Tordenmalm et al show a control system including sensing and braking means for damping a piston as it approaches the end position of travel within a hydraulic cylinder.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have modified the apparatus of Brandt by utilizing a control means for damping the action of the cylinder, as suggested by the combined teachings of Duell et al and Tordenmalm et al, as this would simply be a well known expediency in the art for reducing shock and damage to a piston/cylinder assembly.

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5. Claims 51, 55, 56, 60, 61, and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandt in view of McNeilus et al and Sizemore et al (US 5,505,576), of record.

The apparatus of Brandt as modified by McNeilus et al does not show a hydraulic rotary actuator as the means for pivoting the arm relative to the boom.

Sizemore et al, as noted in paper #15, show a refuse collection vehicle with rotary actuator 49 which rotates lift arm 18.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have further modified the apparatus of Brandt and McNeilus et al by substituting the arm hydraulic cylinder with a rotary actuator, as Sizemore et al show this to be a well known and art recognized expediency for pivoting a lift arm, the use of which in the apparatus of Brandt would require no undue experimentation and produce no unexpected results.

Re claims 51, 55, and 56, note paragraph 5 of paper #15.

6. Claims 52, 53, 57, and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandt in view of McNeilus et al and Sizemore et al, as applied to claims 63, etc. above, and further in view of Duell et al.

As noted in paper #15, Brandt as modified does not disclose controlling the speed of the arm based on the sensed position thereof.

Duell et al, as also noted previously, shows that controlling the rotational speed of a dumping arm 26 can be at least to some extent based on the output of an arm position sensor AP₁.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have further modified the apparatus of Brandt by controlling the rotational speed of the arm based on the arm position sensor, as suggested by Duell et al, as this would provide greater efficiency and flexibility when operating in the automatic mode.


7. Applicant's arguments filed 11/04/04 have been fully considered but they are not persuasive.

Applicant argues that the claimed arrangement eliminates parts necessary in the references and allows the system to operate in constricted quarters. This is not persuasive because the claims are not so limiting as to preclude additional parts or to operate under any particular conditions. Furthermore, the fact that applicant has recognized other advantages which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Keenan whose telephone number is 703-308-2559. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on 703-308-3248. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


James Keenan
Primary Examiner
Art Unit 3652

jwk
01/05/05